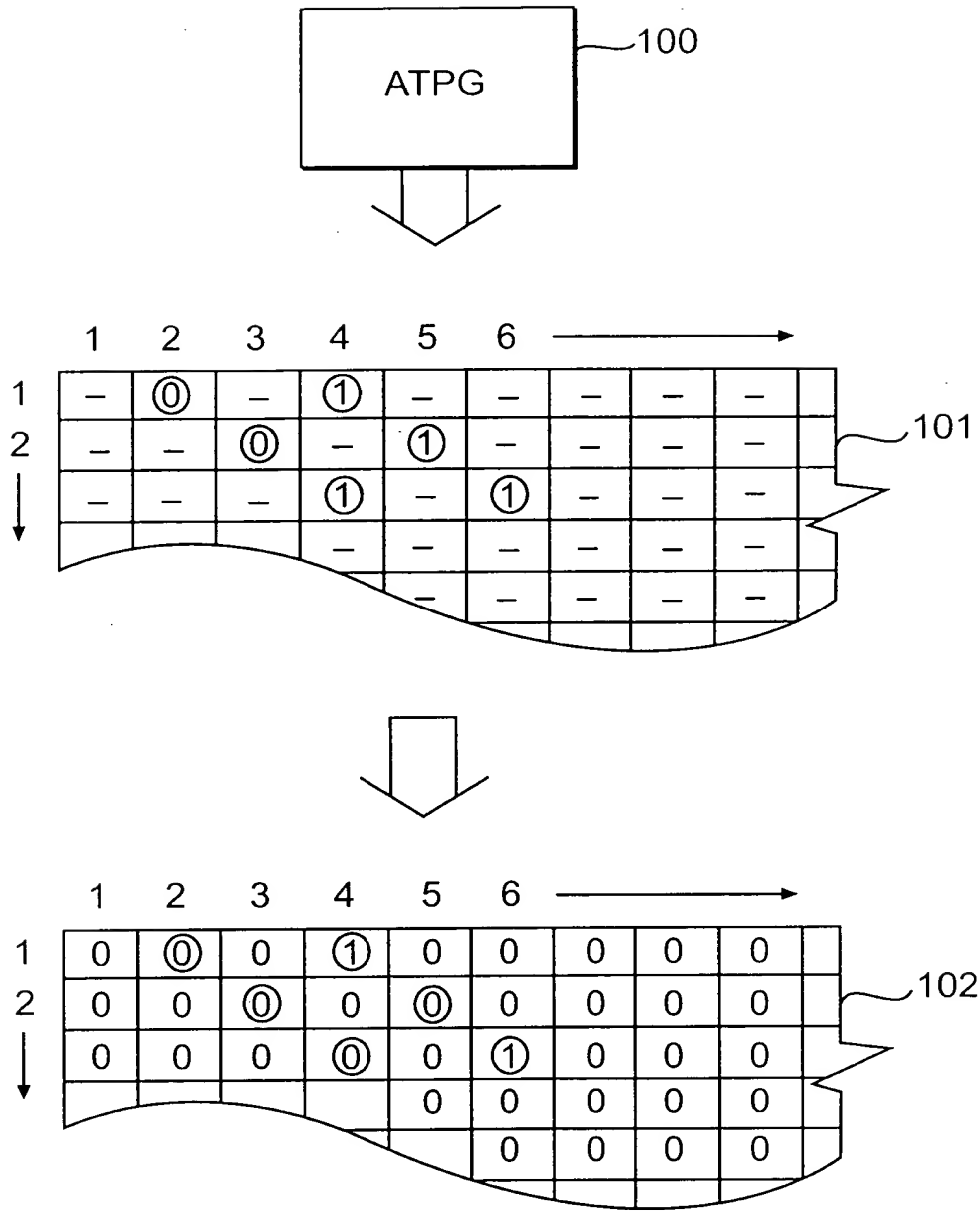


FIG. 1

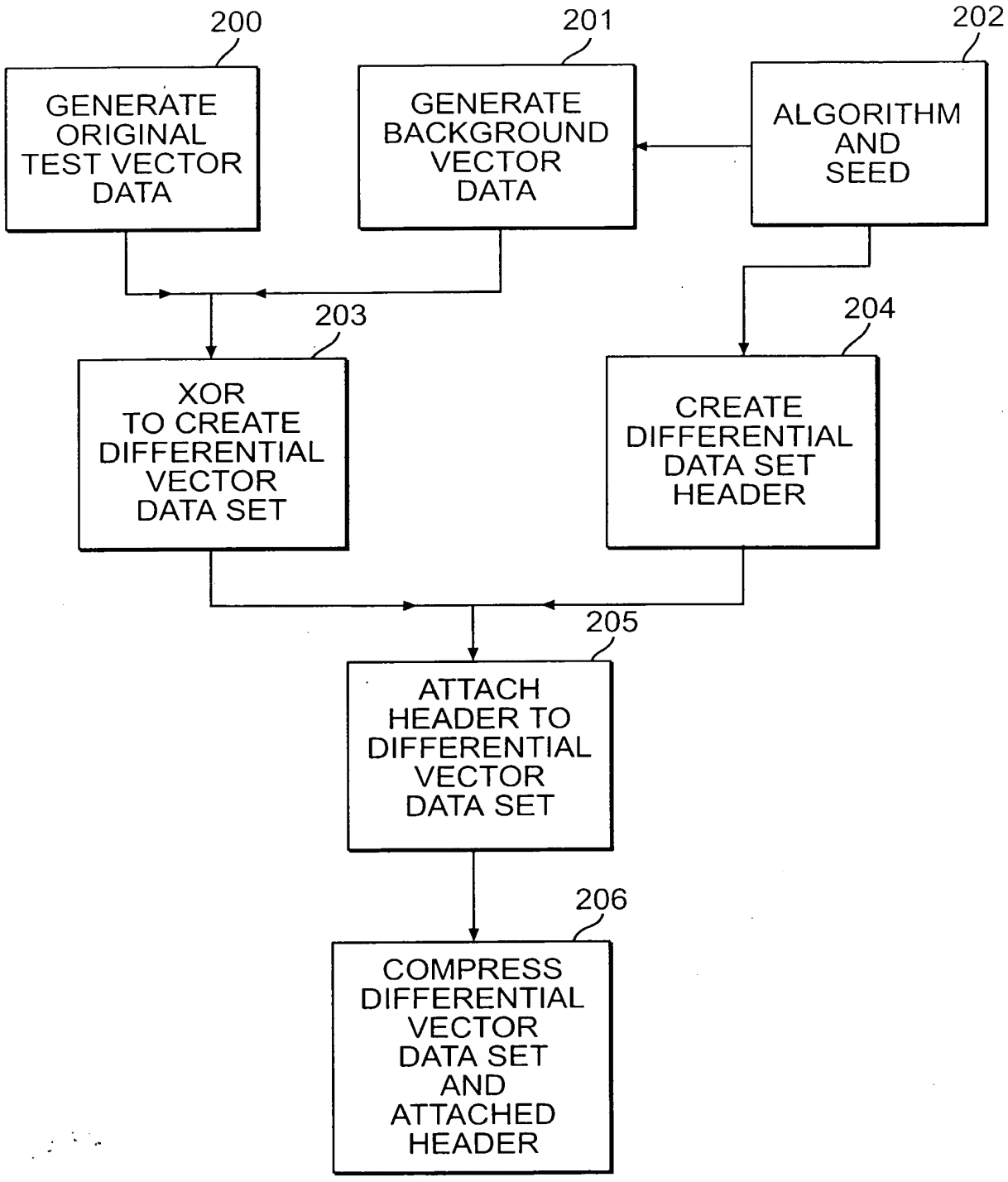

200
GENERATE ORIGINAL TEST VECTOR DATA
201
GENERATE BACKGROUND VECTOR DATA
202
ALGORITHM AND SEED
203
XOR TO CREATE DIFFERENTIAL VECTOR DATA SET
204
CREATE DIFFERENTIAL DATA SET HEADER
205
ATTACH HEADER TO DIFFERENTIAL VECTOR DATA SET
206
COMPRESS DIFFERENTIAL VECTOR DATA SET AND ATTACHED HEADER

FIG. 2

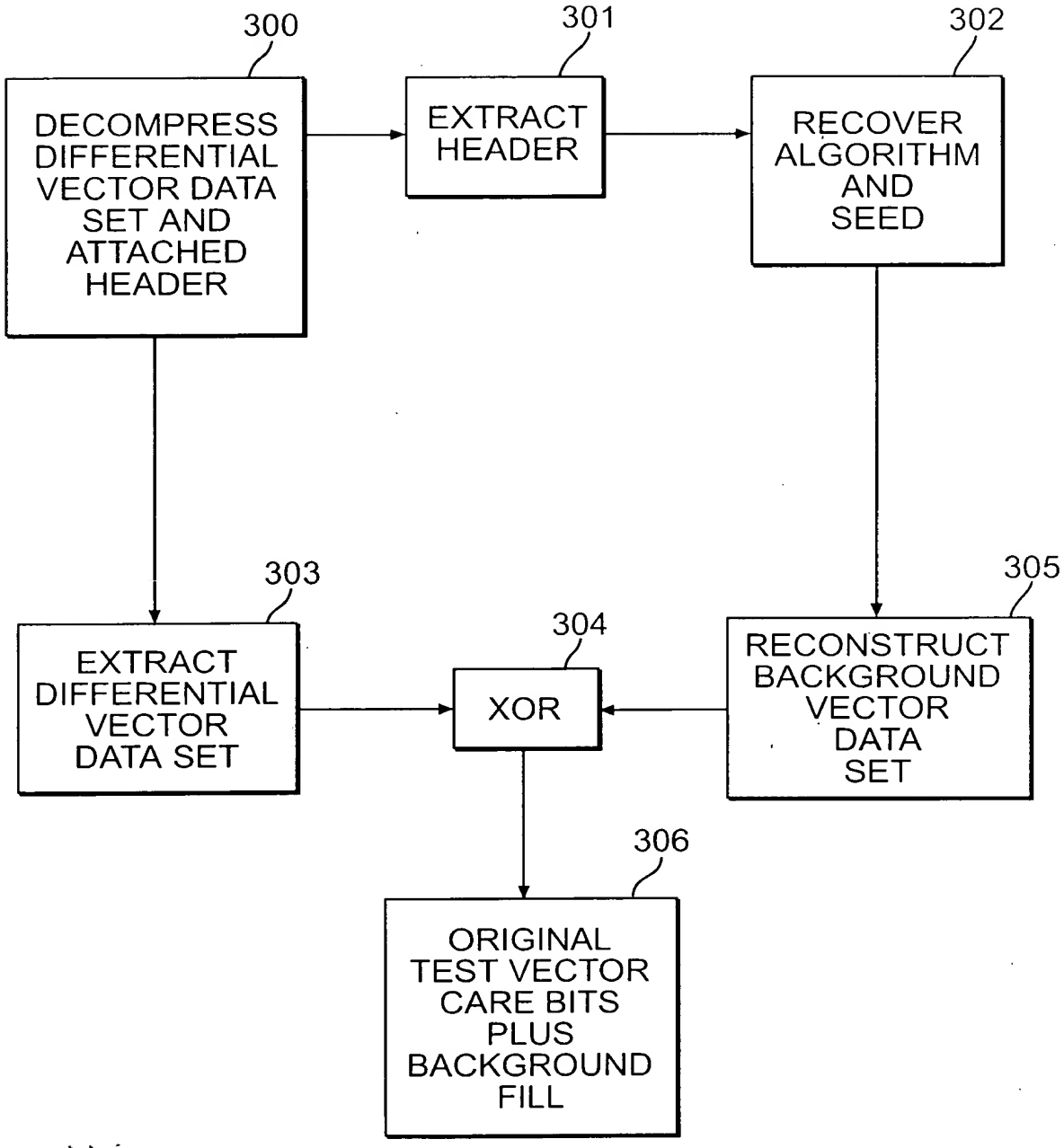
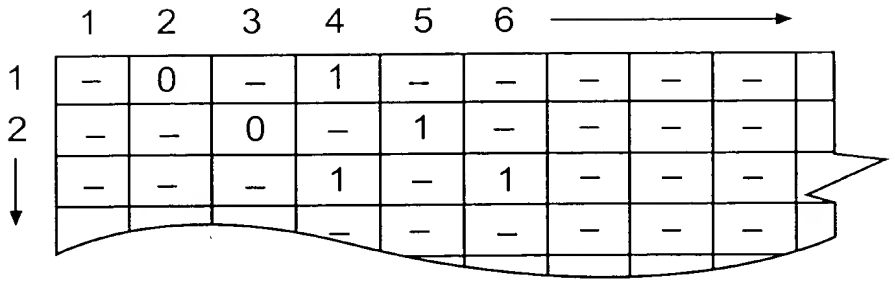
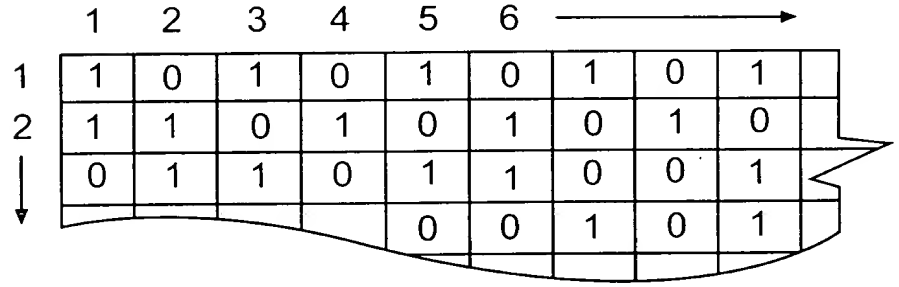

300
DECOMPRESS DIFFERENTIAL VECTOR DATA SET AND ATTACHED HEADER
301
EXTRACT HEADER
302
RECOVER ALGORITHM AND SEED
303
EXTRACT DIFFERENTIAL VECTOR DATA SET
304
XOR
305
RECONSTRUCT BACKGROUND VECTOR DATA SET
306
ORIGINAL TEST VECTOR CARE BITS PLUS BACKGROUND FILL

FIG. 3



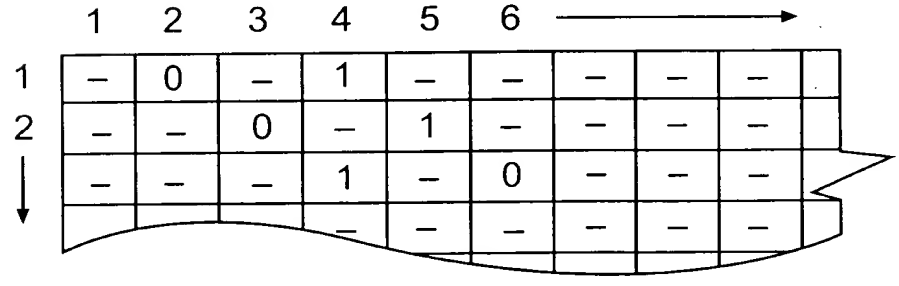
TEST VECTORS

FIG. 4A



BACKGROUND VECTORS

FIG. 4B



DIFFERENTIAL VECTORS

FIG. 4C

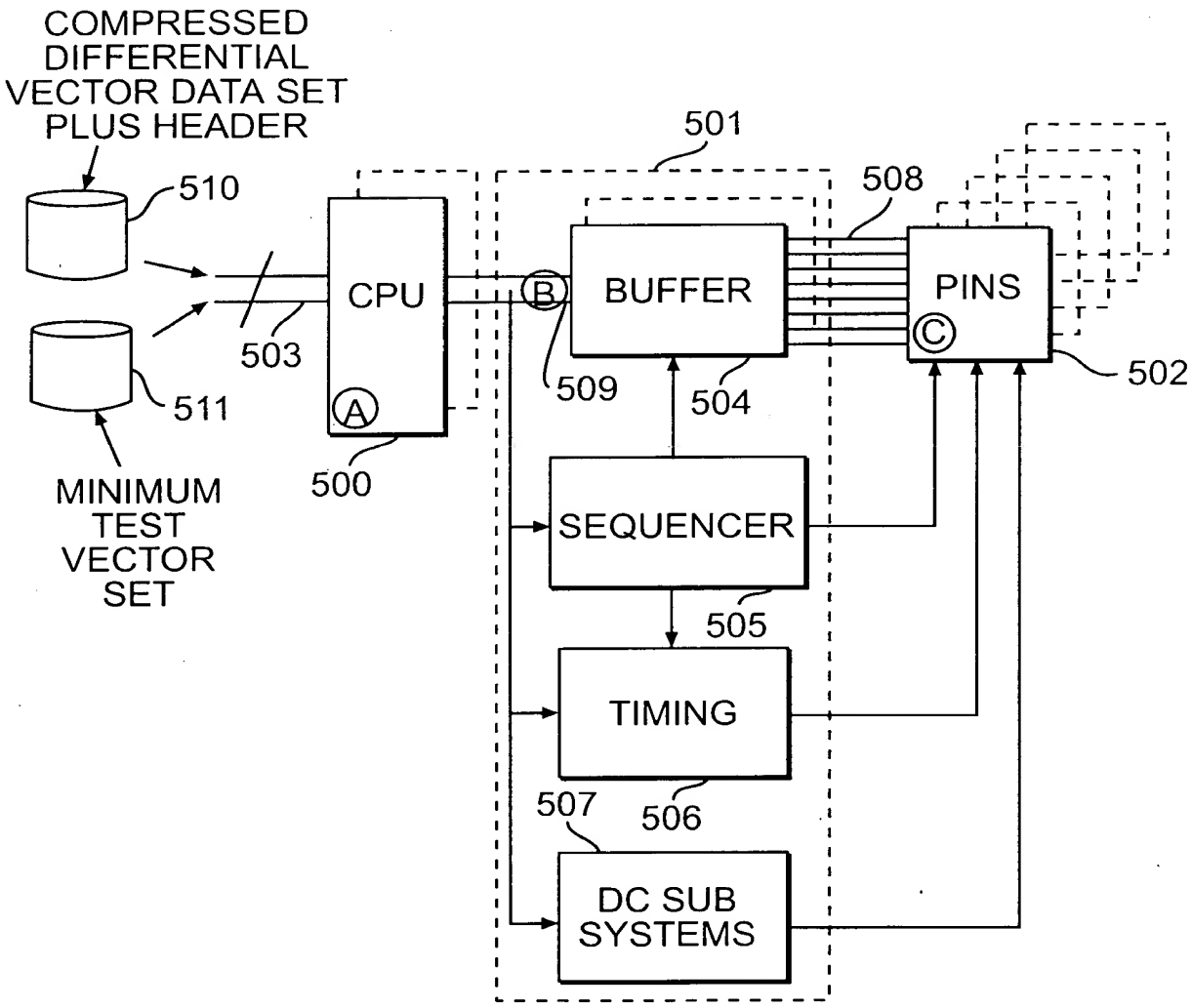

COMPRESSED
DIFFERENTIAL
VECTOR DATA SET
PLUS HEADER
510
511
MINIMUM
TEST
VECTOR
SET
503
CPU
A
500
501
B
509
BUFFER
504
508
PINS
C
502
SEQUENCER
505
TIMING
507
506
DC SUB
SYSTEMS

FIG. 5

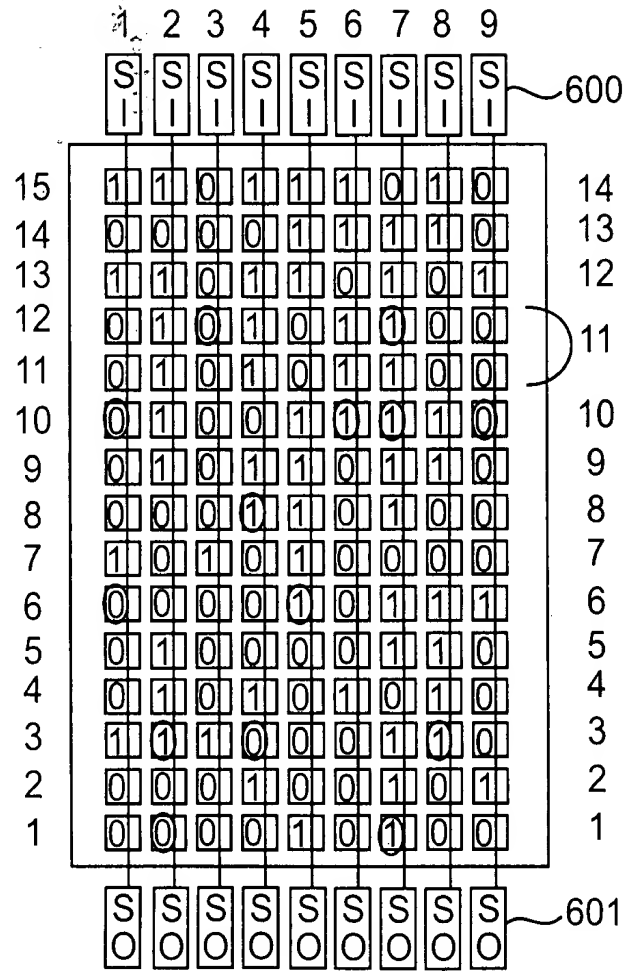

1 2 3 4 5 6 7 8 9
600
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
14 13 12 11 10 9 8 7 6 5 4 3 2 1
601

FIG. 6A

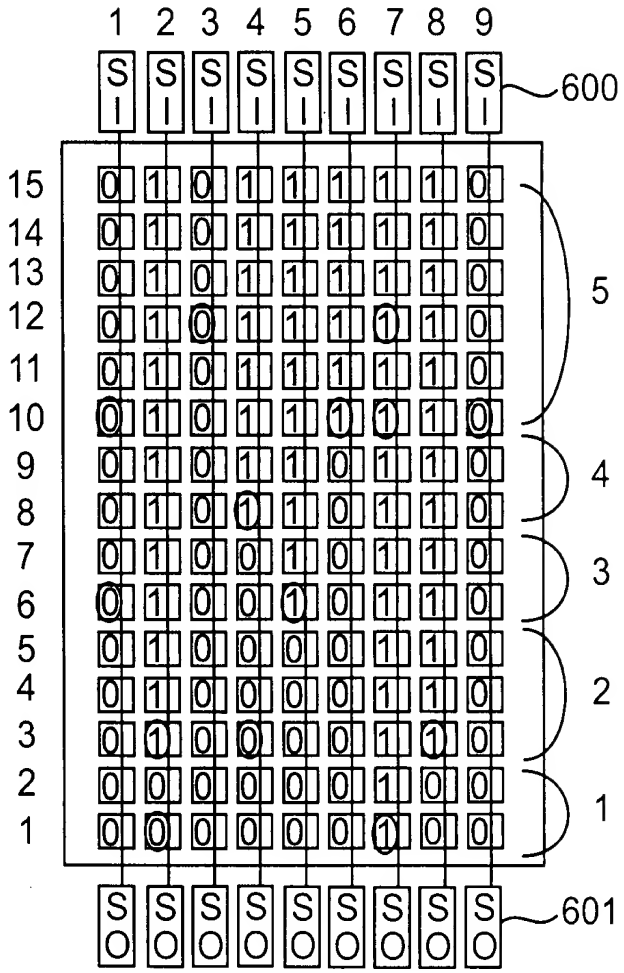

1 2 3 4 5 6 7 8 9
600
15 14 13 12 11 10 9 8 7 6 5 4 3 2 1
5 4 3 2 1
601

FIG 6B

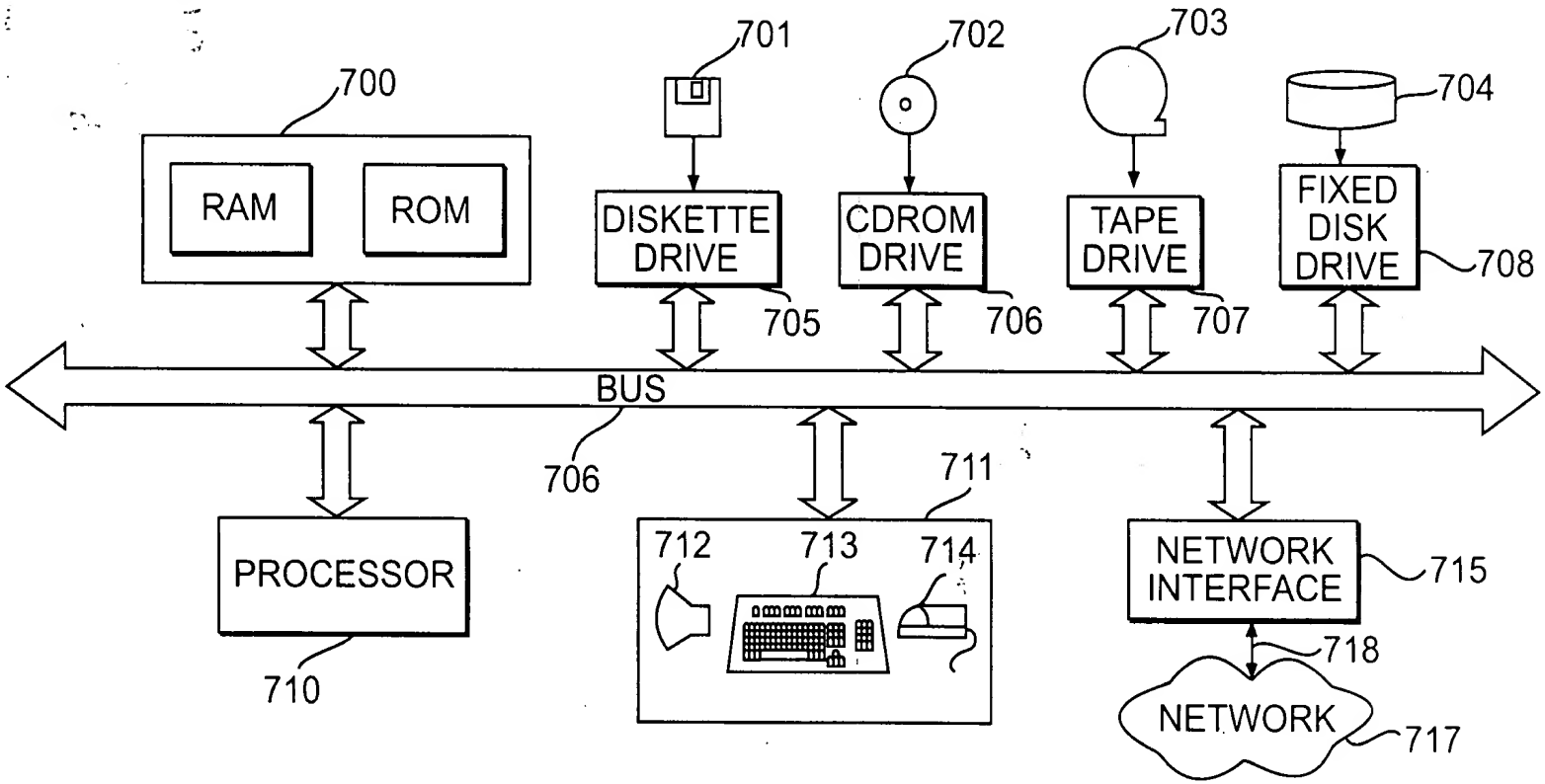

700
RAM
ROM
701
DISKETTE DRIVE
705
702
CDROM DRIVE
706
703
TAPE DRIVE
707
704
FIXED DISK DRIVE
708
BUS
706
PROCESSOR
710
711
712
713
714
NETWORK INTERFACE
715
718
NETWORK
717

FIG. 7